

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|--|----------------------------------|----------------------|----------------------|------------------|--|
| 10/766,576 | 01/27/2004 | David Maxwell Cannon | SJO920030087US1 | 3882 | |
| 46917 759 KONRAD RAYN | 01/19/2007 VES & VICTOR, LLP. | EXAMINER | | | |
| ATTN: IBM37 | | | ROSE, HELENE ROBERTA | | |
| 315 SOUTH BEVERLY DRIVE, SUITE 210 BEVERLY HILLS, CA 90212 | | 210 , | ART UNIT | PAPER NUMBER | |
| | · | | 2163 | | |
| SHORTENED STATUTORY I | PERIOD OF RESPONSE | MAIL DATE | DELIVER | Y MODE | |
| 3 MONTHS | | 01/19/2007 | PAI | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | Application No. | Applicant(s) | | | |
|--|--|---|--|--|--|--|
| | | 10/766,576 | CANNON ET AL. | | | |
| | Office Action Summary | Examiner | Art Unit | | | |
| | | Helene Rose | 2163 | | | |
| Period fo | - The MAILING DATE of this communication app r Reply | ears on the cover sheet with the c | orrespondence address | | | |
| A SHO WHIC - Exten after S - If NO - Failur Any ro | DRTENED STATUTORY PERIOD FOR REPLY HEVER IS LONGER, FROM THE MAILING DASIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. period for reply is specified above, the maximum statutory period we to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing d patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). | | | |
| Status | | | | | | |
| 1)⊠ | Responsive to communication(s) filed on 20 No | ovember 2006. | | | | |
| <i>'</i> — | This action is FINAL . 2b) ☐ This action is non-final. | | | | | |
| , —- | 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| | closed in accordance with the practice under E | x parte Quayle, 1935 C.D. 11, 45 | 53 O.G. 213. | | | |
| Disposition | on of Claims | | | | | |
| 4)🛛 | Claim(s) 1-54 is/are pending in the application. | | | | | |
| 4 | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5) 🗌 | 5) Claim(s) is/are allowed. | | | | | |
| | Claim(s) <u>1-54</u> is/are rejected: | | | | | |
| | Claim(s) is/are objected to. | | | | | |
| 8)[| Claim(s) are subject to restriction and/or | r election requirement. | | | | |
| Application | on Papers | | | | | |
| 9)[] - | The specification is objected to by the Examine | г. | | | | |
| • | The drawing(s) filed on 27 January 2004 is/are: | | to by the Examiner. | | | |
| | Applicant may not request that any objection to the | drawing(s) be held in abeyance. See | e 37 CFR 1.85(a). | | | |
| | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority u | nder 35 U.S.C. § 119 | | • | | | |
| 12) 🔲 / | Acknowledgment is made of a claim for foreign | priority under 35 U.S.C. § 119(a |)-(d) or (f). | | | |
| • - | a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. | | | | | |
| | 2. Certified copies of the priority documents have been received in Application No | | | | | |
| | 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | |
| | application from the International Bureau (PCT Rule 17.2(a)). | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | • | | | | | |
| | | | | | | |
| Attachment | 40) | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) | | | | | | |
| 2) Notice | e of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail D | ate | | | |
| | nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) No(s)/Mail Date | 5) Notice of Informal F 6) Other: | Patent Application (PTO-152) | | | |

Application/Control Number: 10/766,576 Page 2

Art Unit: 2163

Detailed Action

 In response to communication entered on 11/13/2006, Claims 50 and 53 were amended. No claims were added, nor cancelled. Therefore, Claims 1-54 are pending.

2. Applicants arguments with respect to claims 1-54 have been fully considered but they are not persuasive.

Claim Rejections – 35 U.S.C – 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 4. Claims 1-54 are rejected under 35 U.S.C. 102(e) as being anticipated by Ulrich et al. (US Patent No. 6,754,773/Filing Date: Jan. 29, 2002).

 Claims 1, 14 and 50:

Regarding Claims 1, 14 and 50 Ulrich teaches a data management method, comprising:

receiving multiple user files from at least one client station coupled to a data storage subsystem (column 11, lines 53-62 and column 12, lines 19-23, Ulrich);

storing at least some of the multiple user files in a retrieval storage pool at a first location in the data storage subsystem (column 12, lines 60-63, column 16, lines 3-9, Ulrich);

creating a managed file comprising an aggregation of at least some of the multiple user files (column 32, lines 60-61 and column 87, lines 20-23, Ulrich), wherein said managed file creating includes copying user files to an aggregation storage pool and designating the aggregation of user files in the aggregation storage pool as a single file in a database (columns 41 and 42, lines 63-67 and lines 1-42, Ulrich);

applying first predetermined criteria to a user file stored in the retrieval storage pool to designate the user file in the retrieval storage pool as one of a higher priority and a lower priority (column 40, lines 19-44; and column 62, lines 20-27, Ulrich);

deleting from said retrieval storage pool a user file designated as lower priority; and retaining in said retrieval storage pool a user file designated as higher priority (column 63, lines 59-62, Ulrich).

Claims 2, 15, 28, and 41 teaches:

Regarding Claims 2,15,28, and 41, Ulrich teaches retaining in said retrieval storage pool a user file designated as higher priority (column 5, lines 59-60, lines 66-67 and lines 1-10, Ulrich).

Claims 3, 16, 29, 42, 49 and 51:

Regarding Claims 3,16,29,42,49 and 51, Ulrich teaches wherein said first predetermined criteria include the status of the user file as one of active and inactive wherein an active user file currently resides on said client station and is designated a higher priority user file, and an inactive user file once resided on a client station but has been subsequently at least one of modified and deleted on said client station, and is designated a lower priority user file (column 4, lines 45-55 and columns 59-60, lines 65-67 and lines 1-10, Ulrich).

Claims 4, 17, 30 and 43:

Regarding Claims 4,17,30, and 43, Ulrich teaches wherein said retrieval storage pool is located in a disk storage (column 70, lines 28-29, Ulrich).

Claims 5,18,31 and 44:

Regarding Claims 5,18,31 and 44, Ulrich teaches wherein said managed file creating includes copying user files to an aggregation storage pool and designating the aggregation of user files in the aggregation storage pool as a single file in a database (column 56, lines 4-7, Ulrich)

Claims 6, 19, 32, and 45:

Regarding Claims 6,19,32, and 45, Ulrich teaches transferring said managed file from said aggregation storage pool to another location within a data hierarchy in the data storage subsystem (column 26, lines 12-14, Ulrich).

Claims 7, 20, and 33:

Claims 7,20 and 33, Ulrich teaches wherein said copying includes copying user files from the retrieval storage pool to the aggregation storage pool (column 17, lines 22-29, Ulrich).

Claims 8, 21, and 34:

Regarding Claims 8,21 and 34, Ulrich teaches wherein said aggregation storage pool is located in a tape storage (column 20, lines 13-16, Ulrich).

Claims 9, 22, and 35:

Regarding Claims 9,22, and 35, Ulrich teaches wherein said managed file is migrated to a tape storage (Refer to claim 8, wherein this limitation is substantially the same/similar to claim 8, Ulrich).

Claims 10, 23 and 36:

Regarding Claims 10,23 and 36, Ulrich teaches copying received user files to an aggregation storage pool wherein said managed file creating includes creating a managed file comprising a contiguous aggregation of said user files copied to said aggregation storage pool (column 58, lines 65-67, Ulrich).

Claims 11, 24 and 37:

Regarding Claims 11,24 and 37, Ulrich teaches applying second predetermined criteria to a user file received from a client station to designate the received user file as one of a higher priority and a lower priority (Refer to claim 1 wherein this limitation is substantially the same/similar to the limitation within claim 1 Ulrich), and wherein said retrieval storage pool storing includes storing received user files designated as higher priority in said retrieval storage pool (Refer to claim 2 wherein this limitation is substantially the same/similar to the limitation within claim 2, Ulrich), and wherein said copying to an aggregation storage pool includes copying received user files designated as lower priority to said aggregation storage pool (Refer to claim 3, wherein this limitation is substantially the same/similar to the limitation within claim 3, Ulrich).

Claims 12, 25 and 38

Regarding Claims 12,25 and 38, Ulrich teaches wherein each client station has an identity and said second predetermined criteria include the identity of the client station which was the source of a received user file wherein a user file received from a first client station is designated a higher priority user file and is stored in said retrieval storage pool (Refer to claim 3, wherein this limitation is substantially the same/similar to the limitation within claim 3, Ulrich), and a user file received from a second client station is designated a lower priority user file and is stored in said aggregation storage pool (Refer to claim 5, wherein this limitation

Page 7

Art Unit: 2163

is substantially the same/similar to the limitation within claim 5, Ulrich).

Claims 13, 26 and 39:

Regarding Claims 13,26 and 39, Ulrich teaches wherein said first predetermined criteria include the status of the user file as one of active and inactive wherein an active user file currently resides on said client station and is designated a higher priority user file (Refer to claim 2, wherein this limitation is substantially the same/similar to the limitation within claim 2, Ulrich), and an inactive user file once resided on a client station but has been subsequently at least one of modified and deleted on said client station, and is designated a lower priority user file (Refer to claim 3, wherein this limitation is substantially the same/similar to the limitation within claim 3, Ulrich).

Claim 17:

Regarding Claim 17, Ulrich teaches wherein said retrieval storage pool is located in a disk storage (Figure 21 and Figure 22B, diagrams 160, Ulrich).

Claim 18:

Regarding Claim 19, Ulrich teaches wherein said managed file creating includes copying user files to an aggregation storage pool and designating the aggregation of user files in the aggregation storage pool as a single file in a database (Refer to claim 5, wherein this limitation has already been addressed, Ulrich).

Claim 19:

Regarding Claim 19, Ulrich teaches wherein the operation of transferring said managed file from said aggregation storage pool to another location within a data hierarchy in the data storage subsystem (column 24, lines 40-54, Ulrich).

Claim 20:

Regarding Claim 20, Ulrich teaches wherein said copying includes copying user files from the retrieval storage pool to the aggregation storage pool (Refer to claim 7, wherein this limitation has already been addressed, Ulrich).

Claim 21:

Regarding Claim 21, Ulrich teaches wherein said aggregation storage pool is located in a tape storage (Refer to claim 8, wherein this limitation has already been addressed, Ulrich).

Claim 22:

Regarding Claim 22, Ulrich teaches wherein said managed file is migrated to a tape storage (Refer to claim 9, wherein this limitation has already been addressed, Ulrich).

Claim 27:

Regarding Claim 27, Ulrich teaches a subsystem for managing data for use with a plurality of client stations, each client station having user files, comprising:

Application/Control Number: 10/766,576

Art Unit: 2163

a plurality of data storage devices wherein at least one data storage device has a retrieval pool adapted to store user files (Refer to claim 1, wherein this limitation has already been addressed, Ulrich);

a digital data processing apparatus coupled to the storage devices (column 8, lines 28-47, Ulrich), wherein the digital data processing apparatus is programmed to perform a data management method, said method comprising:

receiving multiple user files from at least one client station coupled to the subsystem (Refer to claim 1, wherein this limitation has already been addressed, Ulrich);

storing at least some of the multiple user files in said retrieval storage pool (Refer to claim 1, wherein this limitation has already been addressed, Ulrich);

creating a managed file comprising an aggregation of at least some of the multiple user files (Refer to claim 1, wherein this limitation has already been addressed, Ulrich);

applying first predetermined criteria to a user file stored in the retrieval storage pool to designate the user file in the retrieval storage pool as one of a higher priority and a lower priority (Refer to claim 1, wherein this limitation has already been addressed, Ulrich); and

deleting from said retrieval storage pool a user file designated as lower priority (Refer to claim 1, wherein this limitation has already been addressed,

Ulrich).

Claim 40:

Regarding Claim 40, Ulrich teaches a server for managing data for use with at least one data storage device and with a plurality of client stations, each client station-having user files, comprising:

data processing means for managing data (see abstract, Ulrich), said data processing means having means for:

creating a retrieval storage pool in a data storage device (column 45, lines 1-3, Ulrich);

receiving multiple user files from at least one client station coupled to the server (Refer to claim 1, wherein this limitation has already been addressed, Ulrich); storing at least some of the multiple user files in said retrieval storage pool (Refer to claim 1, wherein this limitation has already been addressed, Ulrich);

creating a managed file comprising a contiguous aggregation of at least some of the multiple user files (Refer to claim 1, wherein this limitation has already been addressed, Ulrich);

applying first predetermined criteria to a user file stored in the retrieval storage pool to designate the user file in the retrieval storage pool as one of a higher priority and a lower priority (Refer to claim 1, wherein this limitation has already been addressed, Ulrich); and

deleting from said retrieval storage pool a user file designated as lower priority (Refer to claim 1, wherein this limitation has already been addressed, Ulrich).

Claims 46:

Regarding Claim 46, Ulrich teaches wherein said data processing means further has a database and wherein at least one data storage device has an aggregation storage pool and wherein the data processing means further has means for copying received user files to said aggregation storage pool wherein said managed file creating includes creating a managed file comprising a contiguous aggregation of said user files copied to said aggregation storage pool (Refer to claim 10, wherein this limitation has already been addressed, Ulrich).

Claims 47 and 52:

Regarding Claims 47 and 52, Ulrich teaches wherein the data processing means further has means for applying second predetermined criteria to a user file received from a client station to designate the received user file as one of a higher priority and a lower priority, and wherein said retrieval storage pool storing includes storing received user files designated as higher priority in said retrieval storage pool, and wherein said copying to an aggregation storage pool includes copying received user files designated as lower priority to said aggregation storage pool (Refer to claim 11, wherein this limitation has already been addressed, Ulrich)

Claim 48:

Regarding claim 48, Ulrich teaches wherein each client station has an identity and said second predetermined criteria include the identity of the client station which was the source of a received user file wherein a user file received from a first client station is designated a higher priority user file and is stored in said retrieval storage pool, and a user file received from a second client station is designated a lower priority user file and is stored in said aggregation storage pool (Refer to claim 12, wherein this limitation is substantially the same as the claim limitation within claim 12, Ulrich).

Claim 53:

Regarding Claims 53, <u>REFER</u> to claim 1, wherein these limitations have already been addressed, Ulrich);

Claim 54:

Regarding Claim 54, Ulrich teaches wherein each client station has an identity and said first predetermined criteria include the identity of the client station which was the source of a received user file wherein a user file received from a first client station is designated a higher priority user file and is stored in said retrieval storage pool (Refer to claim 12, wherein this limitation has already been addressed, Ulrich), and a user file received from a second client station is designated a lower priority user file and is stored in said aggregation storage pool (Refer to claim 12, wherein this limitation has already been addressed, Ulrich).

Application/Control Number: 10/766,576 Page 13

Art Unit: 2163

Examiner's Remarks to Applicant's Remarks

Applicant States:

Claims 1-54 are in the case.

The Applicants have studied the office action dated August 11, 2006 and have made the changes believed appropriate to place the application in condition for allowance.

Reconsideration and reexamination are respectfully requested.

Claims 50 and 53 have been amended to correct inadvertent typographical errors. More specifically, an erroneous period has been removed from each claim. It is respectfully submitted that the amendments are made to clarify recited features and do not narrow the scope of the claimed inventions.

The Examiner has rejected the claims as anticipated (§ 102(e)) by US Pat. No. 6,754,77 to Ulrich. This rejection is respectfully traversed.

Claim 1, for example, is directed to a "data management method, comprising: receiving multiple user files from at least one client station coupled to a data storage subsystem;

storing at least some of the multiple user files in a retrieval storage pool at a first location in the data storage subsystem; creating a managed file comprising an aggregation of at least some of the multiple user files; applying first predetermined criteria to a user file stored in the retrieval storage pool to designate the user file in the retrieval storage pool as one of a higher priority and a lower priority; and deleting from said retrieval storage pool a user file designated as lower priority."

****** (Arguments are Indicated by being Underlined and Bold)

It is the Examiner's position that the recited ""creating a managed file comprising an aggregation of at least some of the user files" is met by creation of a

"Refresh Node" of the Ulrich reference cited by the Examiner. The applicants respectfully disagree.

The Ulrich reference makes clear that a "Refresh Node" of the Examiner's citation is merely a set of fields (Ulrich, col. 33, lines 1 et seq.). The fields of the Refresh Node are not "user files" which are received "from at least one client station coupled to a data storage subsystem" as required by claim 1. Instead, the Refresh node fields are fields of data created for each client that registers a "lock or share." (Ulrich, col. 32, lines 58 et seq.)

The Examiner has cited no portion of the Ulrich reference, which indicates that a Refresh node field was utilized as a user file at a client station. Thus, it is clear that the fields of the Refresh Node cannot be considered to be an "aggregation of at least of some of the user files" which are received "from at least one client station coupled to a data storage subsystem" as required by claim 1.

The Examiner has also cited claim 27 of the Ulrich reference, which recites "a distributed file system that aggregates files across a plurality of servers.... "

However, the Ulrich reference makes clear the distributed files system cited by the Examiner "allows the integration of multiple servers so that the aggregation of servers appears to a client as a single storage device." Ulrich, col. 11, lines 53 et seq. It is respectfully submitted that servers aggregated to appear as a single storage device (storing individual files), are clearly not a "managed file" as that term is used in the present specification.

Applicant Argues:

The Examiner has cited no portion of the Ulrich reference which in any manner teaches or suggests "creating a managed file comprising an aggregation of at least some of the multiple user files" which are received "from at least one client station coupled to a data storage subsystem" as required by claim 1.

Examiner's Response:

Examiner is not persuaded. To further clarify that ULRICH el does disclose the following limitation of "creating a managed file comprising an aggregation of at <u>least some of the multiple user files</u>". SEE columns 41 and 42, lines 63-67 and lines 1-42, wherein if the "parent" server node 150 decides that it will be the owner of the new file, then the process 1800 moves to a state 1830, where the "parent" server creates a new file, makes an appropriate new Filename Entry 410 in the Filename Table 310, and allocates a new G-node 600 for the new file and the "parent" server node 150 has enough information to create the file handle 1300, for the new file and returning to the state 1820, if the "parent" server node 150 decides that another server node should own the new file, the process 1800 moves to a state 1850, where the "parent" server 150 sends a file allocation request to another server of the DFSS 100, wherein the other server will be known as the "second" server and from the state 1850, the process 1800 moves to a state 1855 where the "second" server creates a new file, makes the appropriate new Filename Entry 410 in the Filename Table 310, and allocates the new G-node 600 for the new file, wherein the "second" server has enough information to create the file handle 1300 for the new file and from the state 1855, the process 1800 moves on to a state 1860, where the "second" server sends the file handle 1300 for the new file to the "parent" server node 150 and when the "parent" server node 150 has the file handle 1300 for the new file, the process 1800 moves on to a state 1835, and the state 1835 can also be reached from state 1830 in the case where the "parent" server 150 decided to be the owner of the

Application/Control Number: 10/766,576

Art Unit: 2163

file, wherein "creates a new file makes an appropriate new filename entry in the filename" is interpreted to be" creating a managed file" and "comprising an aggregation of at least some of the multiple user files" is interpreted to be equivalent to "allocates a new G-node for the new file and wherein the process continues to create a new file" is interpreted to be "aggregation of at least some multiple user files", and wherein the process 1800 moves on to a state where the process of file allocation is now complete, also see Figure 18, for the corresponding diagrams.

Applicant States:

The Examiner has also cited a "G-group" which is described in the Ulrich reference as a "set of contiguous Gees 2538 that all relate to a single file."

However, the Ulrich reference makes clear that the Gees 2538 are a plurality of indexed rows containing fields 2532, 2534, 2536 containing information relating to a single file 2605 (Ulrich reference, col. 55, lines 65 et seq., FIG. 29). Thus, it is clear that the fields of the Gees 2538 cannot be considered to be an "aggregation of at least of some of the user files" which are received "from at least one client station coupled to a data storage subsystem" as required by claim 1.

It is the Examiner's position that the recited "applying first predetermined criteria to a user file stored in the retrieval storage pool to designate the user file in the retrieval storage pool as one of a higher priority and a lower priority" of claim 1 is met by a description provided in col. 50, lines 16-34 of the Ulrich reference. However, it is respectfully submitted that the Examination citation appears to describe inserting a "new higher capacity disk ... into the array 140 in place of a lower capacity disk."

Applicant Argues:

Thus, it is clear that the Examiner's citation to the Ulrich reference fails to teach or suggest the recited "applying first predetermined criteria to a user file stored in the retrieval storage pool to designate the user file in the retrieval storage pool as one of a higher priority and a lower priority" as required by claim 1.

Examiner's Response:

Examiner is not persuaded. To further clarify that ULRICH el does disclose the following limitation of "applying first predetermined criteria to a user file stored <u>in the retrieval storage pool to designate the user file in the retrieval storage pool as </u> one of a higher priority and a lower priority". SEE Column 40, lines 19-44, wherein moving on to a state 1630, the server 130 uses the FilenamePtr field 760 of the currently accessed Gnid 710 to locate the associated Filename Entry 410 in the Filename Table 310 and moving on to a state 1635, the server 130 determines if the checksum 412 stored in the currently accessed Filename Entry 410 is greater than the checksum calculated in the state 1625 and Gnids 710 are stored in the Gnidstring 700 in order of checksum 412 values calculated for their associated character strings 414, with the Gnid 710 having the smallest checksum 412 value coming first, wherein this is interpreted to be "<u>lower priority</u>", and this ordering of Gnids 710 by checksum 412 value allows the server 130 to determine whether a desired filename may still exist on the given Gnid-string 700, and if, in the state 1635, the server 130 determines that the checksum 412 found in the currently accessed Filename Entry 410 is greater than the checksum calculated in the state 1625,

wherein this is interpreted to be the "file designated as the user file in the retrieval storage pool as higher priority, then a Gnid 710 for the desired file (with the lower checksum) cannot exist on the currently accessed Gnid-string 700, wherein this is interpreted to be the "file designated as the user file in the retrieval storage pool as lower priority", wherein the process 1515 moves on to a state 1640, where it reports a File-Not-Found Error to the client 110 and returning to the state 1635, and if the server 130 determines that a checksum found in a currently accessed Filename Entry is greater than the checksum calculated in state 1625, then the process 1515 moves on to a state 1645 and the server 130 determines if the checksums and the filename lengths from the two sources match and if either the checksums or the filename lengths (or both) do not match, then this Filename Entry can be ascertained not to be associated with the client's desired file, and the process 1515 moves on to a state 1660, the server 130 uses the SiblingGnidPtr 740 in the current Gnid 710to access the next Gnid in the current Gnid-string, and if the server 130 determines that the checksums and filename lengths do match, then this Filename Entry 410 cannot yet be eliminated, and the process 1645 moves on to a state 1650, where the server 130 performs a character-by-character comparison of the two filenames, which is interpreted to be equivalent to "applying the first predetermined criteria to a user file in the retrieval storage pool to designate the user file in retrieval storage pool as one of a higher priority and lower priority";

Application/Control Number: 10/766,576

Page 19

Art Unit: 2163

Also, SEE column 62, lines 20-27, wherein the server 130 determines how to store data based on the composition of the file and the availability of the different types of parity groups as shown in FIG. 32A, of the different choices for storing File #1, the first parity string 3240 is most efficient as it has the lowest total bytes required for storage (5120 bytes total), as well as, a high utilization value (100%), wherein each of the other parity strings 3241-3243 are less desirable for storing the data in File #1 due to greater space requirements (larger number of total bytes) and in some cases reduced storage efficiency (lower utilization value), which can also read on "applying the first predetermined criteria to a user file in the retrieval storage pool to designate the user file in retrieval storage pool as one of a higher priority and lower priority".

Applicant States:

It is the Examiner's position that the recited "deleting from said retrieval storage pool a user file designated as lower priority" of claim 1 is met by a description in the Ulrich reference of an "Intent Log" in which an Intent Log Entry is deleted following execution of an intention to write metadata to a disk on another server node.

It is respectfully submitted that that an Intent Log Entry is clearly not a "user file" received "from at least one client station coupled to a data storage subsystem" as required by claim 1 and as the term "user file" is used in the present specification.

Application/Control Number: 10/766,576 Page 20

Art Unit: 2163

Applicant Argues:

The Examiner has cited no portion of the Ulrich reference which in any manner teaches or suggests "deleting from said retrieval storage pool a user file designated as lower priority" wherein the deleted user file was received "from at least one client station coupled to a data storage subsystem" as required by claim 1. Examiner's Response:

Examiner is not persuaded. To further clarify that ULRICH el does disclose the following limitation of "deleting from said retrieval storage pool a user file designated as lower priority". SEE Column 63, lines 59-62, wherein the one or more Gees corresponding to the logical disk blocks where the data from the file is stored are updated to reflect their new occupied status, i.e. removed from pool of available or free disk space, which is interpreted to be equivalent to "deleting from said retrieval storage pool a user file designated as lower priority".

Application/Control Number: 10/766,576 Page 21

Art Unit: 2163

Prior Art of Record

1. Blickenstaff et al (US Patent No. 5,537,585) discloses the data storage system in connected to a local area network and includes a storage server that on a demand basis and or on a periodically scheduled basis audits the activity on each volume of each data storage device that is connected to the network.

- 2. Whiting et al (US Patent No. 5,778,395) discloses a system for backing up files from disk volumes on multiple nodes of a computer network to a common random access backup storage means.
- 3. Ulrich et al. (US Patent No. 6,754,773) discloses a programmable data path accelerator.

Point of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helene Rose whose telephone number is (571) 272-0749. The examiner can normally be reached on 8:00am - 4:30pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-

272-1000.

HRR Technology Center 2100 January 10, 2007

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100